



## Blindness/Vision Loss

There are different levels of vision loss. A person with vision impairment or “low vision” has a significant reduction of visual function that cannot be fully corrected to a “normal” level by ordinary glasses, contact lenses, medical treatment and/or surgery.<sup>1,2</sup> Vision impairment may be caused by the eye’s inability to see objects as clearly as usual or to see as wide an area as usual without moving the eyes or turning the head.<sup>2</sup> People with severe low vision, very limited vision, may be considered partially sighted and/or legally blind.<sup>1,3</sup>

Most people who are considered “blind” have at least some usable vision that can help them, but the most severe level of vision loss, complete blindness, leaves a person in the dark.<sup>2,3</sup> There are countless causes of blindness.<sup>4</sup>

Vision loss may occur due to disease or injury.<sup>3</sup> Vision impairment or blindness can be caused by damage to any portion of the eye or the optic nerve (affects its ability to receive or process visual information) and damage to the brain (prevents it from processing visual information correctly).<sup>2,4</sup>

### Prevalence:

- About 14 million Americans have low vision<sup>1</sup>
- The most common causes of blindness in the United States are diabetes, glaucoma, macular degeneration, and accidents (such as chemical burns or sports injuries)<sup>3</sup>
- Between 2003 and 2007, approximately 1,162 service members sustained direct eye injury or trauma and were evacuated during Operation Iraqi Freedom and Operation Enduring Freedom<sup>5</sup>
- Out of the wounded service members evacuated, an estimated 13 percent sustained direct eye trauma, the highest percentage of eye wounded in more than 160 years of American wars<sup>5</sup>
- It has also been discovered that a traumatic brain injury (TBI) can cause visual complications even when the eyes have not sustained trauma<sup>5,7</sup>
- Seventy-five percent of service members with TBIs have complaints about vision problems<sup>5</sup>

Service members serving during the Global War on Terrorism have suffered more eye injuries than in the last 160 years of American wars.<sup>5</sup> The top three contributors to combat eye injuries have been roadside bombs or improvised explosive devices (IEDs) (56.5 percent of the injuries), rocket-propelled grenades (RPGs), and mortars (a muzzle-loading cannon with a short tube that throws projectiles at high angles).<sup>5</sup>

Even though service members may be wearing protective eyewear at the time of an explosion, the force of the blast can remove this protection and leave the eyes exposed.<sup>6</sup> These explosions disperse shrapnel (bomb, mine or shell fragments) that can cause a great deal of damage to the eyes.<sup>6</sup> Once a service member sustains eye trauma, he/she is treated as quickly as possible and evacuated to another facility when safe and appropriate.<sup>6</sup> Many combat eye injuries require multiple surgical procedures and treatments at several hospitals or military treatment facilities.<sup>7</sup> Partial or total vision has been restored in many cases involving eye injuries, but other service members with more severe or complex injuries have impaired vision or have been blinded.<sup>6</sup>

### **U.S. Army Wounded Warrior Program (AW2)**

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